

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended): A cooling fin structure connected to a substrate with a welding flux solder, the cooling fin structure comprising:

at least one thermally conductive sheet, each of the thermally conductive sheets being bent to form a heat radiation part and a welding bonding part, the bonding welding part having a flat surface in contact with the substrate and being formed with a vacant region;

wherein the solder welding flux is disposed between the substrate and the bonding welding part, and the vacant region exposes the squeezed welding flux solder underneath.

Claim 2 (currently amended): The cooling fin structure of claim 1, wherein the vacant region is defined by notches formed on an edge of the bonding welding part.

Claim 3 (currently amended): The cooling fin structure of claim 1, wherein the bonding welding part has a serrate edge.

Claim 4 (withdrawn): The cooling fin structure of claim 1, wherein the vacant region is defined by openings formed on the welding part of the thermally conductive sheet.

Claim 5 (withdrawn): The cooling fin structure of claim 4, wherein the openings are in a circular shape or a polygon shape.

Claim 6 (withdrawn): The cooling fin structure of claim 1, wherein the vacant region is defined by a slot formed on the welding part of the thermally conductive sheet.

Claim 7 (original): The cooling fin structure of claim 1, wherein the material of the thermally conductive sheet is selected from the group consisting of aluminum, copper, aluminum alloy, copper alloy, and their compounds.

Claim 8 (original): The cooling fin structure of claim 1, wherein the material of the substrate is selected from the group consisting of aluminum, copper, aluminum alloy, copper alloy, and their compounds.

Claim 9 (original): The cooling fin structure of claim 1, wherein the thermally conductive sheet is bent through sheet metal work.

Claim 10 (original): The cooling fin structure of claim 1, wherein the thermally conductive sheet is bent to form an L-shape cross-section.

Claim 11 (currently amended): A fin assembly, comprising:

a substrate; and

a plurality of cooling fins, each of which being bent towards one direction to form a heat radiation part and a bonding welding part, the bonding welding part having a flat surface being welded soldered on a surface of the substrate to connect the cooling fins to the substrate;

wherein the bonding welding part is formed with a vacant region such that part area of the surface of the substrate between adjacent two of the cooling fins is not covered by the cooling fins.

Claim 12 (previously presented): The fin assembly of claim 11, wherein the cooling fin is bent through sheet metal work.

Claim 13 (previously presented): The fin assembly of claim 11, wherein the cooling fin is bent to form an L-shape cross-section.

Claim 14 (currently amended): The fin assembly of claim 11, wherein the vacant region is defined by notches formed on an edge of the bonding welding part.

Claim 15 (withdrawn): The cooling fin structure of claim 11, wherein the vacant region is defined by openings formed on the welding part.

Claim 16 (withdrawn): The cooling fin structure of claim 15, wherein the openings are in a circular shape or a polygon shape.

Claim 17 (withdrawn): The cooling fin structure of claim 11, wherein the vacant region is defined by a slot formed on the welding part.

Claim 18 (previously presented): The fin assembly of claim 11, wherein the thermally conductive material is selected from the group consisting of aluminum, copper, aluminum alloy, copper alloy, and their compounds.

Claim 19 (previously presented): The fin assembly of claim 11, wherein the material of the cooling fin is selected from the group consisting of aluminum, copper, aluminum alloy, copper alloy, and their compounds.